YEAR BOOK OF THE HEATHER SOCIETY

ROYAL BOTANIC GARDENS KEW





THE HEATHER SOCIETY

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The President Writes— Is not the Heather Society International?

Sir John Charrington, Aston Rowant, Oxford-shire.

Shortly after the Society was formed it became clear that it was the only Heather Society, for we soon began getting letters from various parts of the world where were being grown and it was evident that our

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the R.H.S. to establish our seniority; others felt that our members in Holland should be encouraged to maintain their direct membership. I am pretty confident that a good and close feeling exists. If language is not too big a handicap, I should much like to think that conferences were held each year in our respective countries; when I feel sure much could be learned.

In the U.S.A. we found there was a great deal of interest, concentrated into certain parts, and to foster this good feeling we invited Mrs. Metheny to become one of our Vice-Presidents. Unfortunately I think, we no longer give the names of our members in the Year Book so that it can be seen from how many countries our overseas members come. It is impressive.

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In no country was the enthusiasm for heather growing greater than in Holland, and before long a feeling of goodwill and mutual interest grew. When we visited the Royal Horticultural Society's heather garden at Wisley for the first time a leading Dutch enthusiast came to England so that he could come with us, and I was detailed by Mrs. MacLeod to give him lunch at my Club and drive him to Wisley.

Shortly afterwards I remember discussions at committee meetings about the attitude which we should adopt towards Dutch members of the Society. Personally I was in favour of the Dutch running their own Society and affiliating with our British Society – as we do with the R.H.S. – to establish our seniority; others felt that our members in Holland should be encouraged to maintain their direct membership. I am pretty confident that a good and close feeling exists. If language is not too big a handicap, I should much like to think that conferences were held each year in our respective countries; when I feel sure much could be learned.

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I wonder whether nurserymen realise how much they

owe to the Society?

The list of growers, which is published in the Year Book, has lengthened greatly, and it must surely be to their advantage that the Society has done so much to spread the interest in heathers which has led to so great an increase in their cultivation.

When the idea of residential conferences was first mooted I confess I did not think they would succeed. May I confess again how utterly wrong I was, and how glad I am to read of what sounds like ever growing

success.

المنجوعا

Greetings from the Chairman

Alfred H. Bowerman, Champs Hill, Cold-waltham, Pulborough, Sussex

Once again it is my pleasure to greet you all on behalf of the Heather Society as we come to the end of one of the driest summers of the century. Whilst holiday makers will long remember the blue skies and glorious sunshine, the extreme heat proved a severe test to plant life. Here in the South East of England the prolonged drought took its toll of newly planted heathers and even some of those well established were scorched by the intense heat. Despite our fears at Champs Hill that our losses might prove to be serious, the Autumn rains have sparked off remarkable new growth. Time alone will prove the extent of the recovery.

Our Annual Conference held this year at Moor Park, Farnham, was a happy occasion and a great success despite the heavy storms which descended on us. These however did not dampen the enthusiasm of those of us who visited the beautiful gardens opened to us. Our Events Committee are making arrangements for our conference to be held next year at the Snowdonia National Park Study Centre, on August 20–22. I understand that this venue will prove very popular and I advise all members who are contemplating coming to

book early to save disappointment.

As I write these notes in early November we are still enjoying a profusion of Daboecias and the Callunas are loathe to bow out! With flocks of geese coming South and the wood-pigeons in their thousands already migrating, one wonders if we are in for a severe winter?

Mrs. Bowerman joins in wishing you all a happy New

Year and good gardening in 1976.

الحدجميما

From the Treasurer

New Banker's order forms are being sent to all members for the new subscription rate which becomes effective in 1977. It is requested that they should be signed with your Zone number (I. Smoke No. 7) and returned as soon as possible to the Secretary for recording, and not direct to your bank.

Kertan

Farnham 1975

Lily and Harry Fulcher, Norwich

Although this was to be our first Conference attendance, we need not have had any qualms, for as soon as we arrived at Moor Park College, a house of great historic interest, standing in beautiful grounds and situated in an attractive part of Surrey, quite near to Farnham, we were soon put at ease.

In opening the Conference our Chairman, Mr. A. H. Bowerman, introduced to the members, Mrs. Pamela Lee of Hindhead the local Group leader, for whom words alone are inadequate to express our thanks for the tremendous job she accomplished in making all the

arrangements for the conference.

Saturday was a very busy day starting with Mr. David Small's questions and answers on propagation and related matters. This proved to be very useful and constructive and could have continued for much longer.

This was followed by a most entertaining and interesting account of the life of a heather nurseryman by Mr. P. Davis of Haslemere, not only about the wild life in his area (this included his 'half cat'). It seemed to us his knowledge and interest was as great as his nursery work. It was good to meet and welcome his 91 year-old friend, Mr. Hale, a Heather Society member of many years, who brought specimens of a beautiful sport from his heathers.

After coffee we had an account of the life's work of Mary Delany (1700–1788) and her marvellous collages of heathers, illustrated by some beautiful slides of her work, by Mrs. A. R. Hayden, who had made a great study of her life. We will long remember the delightful talk by Mrs. Molly Boxall on 'arranging your heathers' given in such a light hearted way. She invited the men to leave if they had something better to do, but they all stayed, which speaks volumes for her entertaining manner. These talks are recorded elsewhere in the Year Book, but we must say how much each one was enjoyed by all.

Our Chairman, kept everything to a strict timetable, and the Annual General Meeting, together with reports from the Secretary, Mrs. C. I. MacLeod, the Treasurer, Mr. E. R. Turner and the election of officers, then followed. Several subjects were discussed during the Open Forum, those of special note being the photographic competition, details of which are in the Autumn Bulletin, and a Badge for the Society so that we can

recognise members.

After lunch, a scenic ride brought us to the Chairman's garden at 'Champs Hill'. This is not the first time he has been invaded, we understand! What a delightful place this is where as a bonus a welcome tea awaited us. Mr. Bowerman explained to us all about the wild life that abounds in his garden. Saturday evening we were so snug and warm, and being shown such lovely slides of Brigadier Smith's and Mrs. Cowan's heather gardens, that we had little idea of the downpour of rain outside.

Sunday also became a very full day, several members attended the 8 o'clock service in the lovely Chapel of Moor Park. After breakfast, groups visited the gardens of Brigadier Smith, Mrs. Cowan, and Mrs. Strover, and even in the terrible downpour of rain they were beautiful. The added attractions were Mrs. Cowan's heather lawn and Mrs. Strover's studio with her paintings and

sculptures of birds and animals.

Later Peter Vickers gave us the story of what's happening at Harlow Car, and great credit must be given to him and his team of workers for the efforts they are making there. David Small made an appeal for more helpers in the Members' Trials. The Chairman then officially closed the conference, his summing up being

'the happiest conference ever'.

After lunch most of us went to Wisley where Mr. Clayton, Public Relations Officer for the R.H.S. and a Heather Society member, showed us the Heather garden and explained its workings. This was excellent but the weather conditions made it far from pleasant. After their visit members who were staying overnight returned to Moor Park to entertain and amuse themselves. Members' slides were shown, Mr. Jack London's of the 1974 Conference at Stirling proved to be very popular and the time passed all too soon in the relaxed and happy company.

We approached our first conference with the firm idea of quietly listening to and learning from the more knowledgeable folks who have attended on other occasions. However, this was not how it worked, for anyone who had anything to contribute was warmly encouraged to speak up. We hope to be able to attend

further conferences.

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First Impressions

Ian Small (Aged 13), Ipswich, Suffolk

I have been asked by the Editor to give my impressions of the conference. I did not really want to but Dad forced me into it.

I have always been interested in trees and the huge old

cedar in the college gardens was particularly interesting. My father, Mr. McClintock and a friend assessed the age of the tree by putting their arms round it. They estimated it to be 252 years old.

The talks and slide-shows were very interesting and enjoyable, and I did not find them boring at all. One of the things I noticed during the week-end was the way that people pronounced heather names in different ways.

I enjoyed the visit to Champs Hill. The garden and everything about it was fabulous. I was surprised though, to see the heavy losses caused by the drought. It appears that on the light soil the heathers have not withstood the drought as well as they have on the heavy soil where I live.

The other visit I enjoyed was the one to Wisley at the end of the week-end. Even in the pouring rain some of the heathers stood out, such as the *Daboecia cantabrica* Atropurpurea". I was also interested to see how *Calluna* Firebreak' differed in colour and habit from our 'Firebreak'.

I certainly enjoyed this year's conference and I am looking forward to next year's in Wales.

(It has since been established that the Cedar was about 180 years old. Ed.)

Karona J

The Evolution of a Heather Garden

P. G. Davis, Haslemere, Surrey.

When I arrived in Haslemere, many years ago, the household equipment and the furniture arrived in one vehicle and the garden – 6,000 plants and rooted cuttings in 3 in. pots – in another. Clay pots, of course; plastic was unheard of. Would this were still the case!

We only had a small garden, so much of this material had to remain in pots, which became larger and larger as time went on; but eventually fate took a hand and I was able to buy two acres of rough pasture immediately behind the garden. A contractor ploughed it for me; taking out and burning the couch grass took almost a year, and at the same time we dug out a trench along the new boundary and sowed the hedge with buckets full of mixed berries, hazel nuts, beech nuts and acorns. This provided the first lesson – what would, and what would not grow on a dry grey 'sand' overlying sand, rock and ironstone. The Hollies, Beech and Hazel flourished and many Birch seedlings arrived uninvited but Hawthorn and most of the other berrying subjects failed entirely. Nevertheless a satisfactory hedge was achieved.

From the beginning, the permanent features were planted to provide two things, shade, since the area had none of its own, and autumn colour because the Haslemere district is already overstocked with drab conifers and rather dull birches. We had to wait quite a long time for the framework to take shape - planting two acres can be an expensive business - but many of the trees came from a Derbyshire wholesale nursery which specialised in 'lining-out' stock and the results have been entirely satisfactory. The foot-high Tulip tree, which cost one shilling and twopence in those days, is now twenty feet high and the Arbutus, the Hamamelis (grown from seed) and Judas Trees (Cercis siliquastrum) are in proportion. To these have been added innumerable specimens grown from either seed or cuttings provided by generous gardening friends. Sometimes one has to wait rather a long time for the climax which comes with the first flowering - eighteen years for Rhododendron thompsonii from seed and the Tulip tree probably won't flower for at least a further twenty, but there is a great deal of satisfaction to be had from a homeproduced plant which is almost entirely lacking in one bought at great expense from a nursery.

Heathers came rather late and, as so often happens, they came because there were certain areas which absolutely refused to grow anything else! Messrs. Maxwell and Beale supplied the first consignment – practically nobody else grew heathers in those days, now everybody does – and we filled the front garden with

them. They flourished, and so they should, since the countryside around is almost all heatherland, except for the unsightly blocks of Pine which the National Trust insists are necessary to help them balance their budget,

and the collection grew and is still growing.

Some species find our conditions a little trying. The site is nearly seven hundred feet above sea level on a hill at the edge of Blackdown and there is very little protection from the elements. Erica ciliaris varieties sulk if they are planted in a newly cleared area, but the secret is to place them amongst older, established Callunas where they will get the protection (and the support) which nature intended them to have. E. tetralix clones, too, find our arid conditions difficult to cope with and the hot, dry summer of 1975 took its toll of even the older The Daboecias, strangely enough, flowered magnificently from early June to November and appeared

to be completely unaffected.

The 'heathers' on the commons around are, of course, E. cinerea and Calluna, and it is these which form the backbone of our heather collection, together with all the varieties of E. carnea I can find. E. carnea should surely be in every garden in the land! I have yet to find a soil on which it will not grow; where possible I give mine a little lime to improve the foliage colour, but they grow well enough without it. They will grow on clay; if necessary they will flourish on pure chalk, and I have in my garden a form which I brought back from Austria many years ago. We peeled it from the rock face - a mat of fibrous root embedded in a two inch thick mat of decayed vegetable matter and beneath that, solid limestone rock. Add to this list of virtues the facts that varieties may be had in flower in any month from November to mid April, and any individual plant can be expected to bloom continuously for at least ten weeks, that it needs no annual trimming, that the flowers, having accomplished their mission, disappear gracefully leaving a neat hummock to be followed almost immediately, or so it seems, by next season's flower buds, and you have my definition of the perfect garden plant.

Self-sown seedlings of E. cinerea and the Callunas

appear all over the garden and since the parents are all garden varieties most of them are 'coloured'. Most of them have to go, of course; some because they are inferior, but many only because they are so like varieties which have already been named; but just occasionally we do get one which is worth propagating. Some idea of the extreme acidity of my soil can be gathered from the fact that there are invariably as many seedlings in the limed beds as there are in those which are untreated, and there must surely be another lesson somewhere in the fact that I have only once found a seedling of *E. carnea*.

That, then, is the story of a heather garden – for the heathers are certainly the background against which the more transient trees and shrubs grow. Why do the heathers do so well? Probably, I suppose, because it was heather garden a thousand years ago. It didn't have the coloured foliage varieties which it has today, of course, and most of the cinereas were plain royal purple – but in its way it was probably just as beautiful.

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Mary Delany 1700-1788 and her Paper Mosaicks

Mrs. R. Hayden, Bath, Avon

A childhood spent in the countryside gave the observing Mary Granville a deep love of nature, and in particular of flowers. At 17, an arranged marriage with a man three times her age caused her much suffering, but it was to her exquisite embroidery that she turned to keep up her spirits till her husband Alexander Pendarves' death seven years later.

The charming and talented Mary Pendarves married again, at 40, an Irish clergyman Patrick Delany, a happy marriage of 25 years. He encouraged her to develop her skills as a designer, working with sea-shells decorating walls and ceilings, cutting silhouettes and continuing her beautiful needlework – in which she generally depicted

nature.

At the age of 73 she began her recreation of paper flower mosaicks. She describes how by chance she saw a piece of Chinese paper, scarlet in colour, lying near a geranium. She immediately took some scissors and snipped the paper into the shape of petals, and was so pleased with the effect that she cut out the calyx, stalks, and leaves in shades of green and pasted them down. Greatly encouraged, Mrs. Delany continued this new art until she was 85.

As her skill progressed, she cut paper so finely that many shades would be used and stuck one upon another to create colour and depth, and more breath-taking becomes one's admiration for her work. She completed nearly 1,000, of which 976 are in the British Museum and

12 in the Royal Archives.

On the reverse of her collages she records the date, and frequently the place where she did it, the giver of the flower, and the garden whence the plant came. As she moved in a circle of influential people, the historical interest is considerable. Lord Bute, the Prime Minister and keen botanist, Mr. Lee, gardener to the Duke of Northumberland at Sion(sic.) the Swedish botanists Solander and Alstroemer, and Dr. Pitcairn who had five acres of botanical garden at Islington all gave her flowers. But perhaps the most treasured of all, on the back of "Amaryllis Regis" (Hippeastrum vittatum), she has written, "Sent me by the Queen".

In one volume she includes 12 Ericas and in another *E. concinna* and *Andromeda Daboecia*. The details provided by her are set out below, together with comments in brackets. St. James's Place is where she was living, Bulstrode the Duchess of Portland's home, where she often spent weeks on end; Luton Hoo, Lord Bute's

country house at the time.

Erica arborea ?triflora (in pencil). St. James's Place. 28 April 1777. Kew. (Is probably E lusitanica).

Erica from the Cape, Heath, baccans (in pencil). St. James's Place 7 May. Lee (Correct).

E. cerinthoides Ethiopia. Luton 29 August 1777. (Ethiopia was then used vaguely for Africa).

E ciliaris (no details, but must have come from abroad

because it was not known to be a British plant until 1828).

E cinerea Fine-leav'd Heath. Bulstrode. 25 September 1776. (Presumably cultivated, because Bulstrode is on chalk).

E coccinea Scarlet-flower'd Heath. Bulstrode. Nov 1776. (Is possibly E pillansii. Mosaick includes one real floret

and one real leaf).

E conccina Flesh-coloured H. Scarlet-flowering Heath. Bulstrode. 12 Nov 1781. (A synonym of E verticillata of Bergius. The specimen has very pale pink flowers).

Erica non-descript (crossed out) grandiflora. Bulstrode.

9 Sept 1777. Kew. (Correct).

E longiflora Long-flower'd Heath. St. James's Place.

1 June 1779. (Is E curviflora).

Erica new species (crossed out) longiflora, curviflora (in pencil). Luton Park. 24 June 1778. (Is indeed curviflora).

E mediterranea Mediterranean Heath. St. James's Place. 7 May. Lee (E erigena which again must have come from abroad, because the Irish colonies were discovered only in 1830).

E multiflora Fir-leav'd Heath. Bulstrode. 3 Sept 1776.

(Is, as usual at that time, E vagans).

E tubiflora?. See E longiflora (crossed out). St. James's Place. 16 April 1778. From Dr. Pitcairn, Islington. (Is E curviflora).

Andromeda Daboecia Irish Heath. Bulstrode 1774. (Daboecia cantabrica. It was in cultivation at Kew in

1769).

My slides of these were closely examined at Kew, who helped with the above comments. They were quite unaware of the existence of these fascinating, early and important records, and amazed that the detail was so fine that names could be given in a way often impossible with even good colour photos of plants. Kew has no other records of what was grown there so early. These collages are worth more research, and the slides have now been sent to Mr. Oliver in South Africa.

The six volumes of her letters complete the fascination of my research into her life of such unbounded love and

affection for her family and friends, which seems to overflow from her heart into her creative art. This modest old lady gained the admiration and affection of all who knew her. King George III and Queen Charlotte and their children were devoted to her, and to Princess

Elizabeth she taught the art of collage.

If anyone is interested in hearing more about Mary Delany, I hope they will get in touch with me as I now have a considerable collection of slides of her work, including in addition to her collages her court dress embroidered all over with flowers by her, and next year I hope to include examples of her shell-work.

العنجني

Foliage, Flowers and Heathers

Mrs. M. L. Boxall, Kingswood, Surrey

Our men – bless them – grow such beautiful heathers, that we ladies are always tempted to pick and enjoy them in our homes, but they become very apprehensive when we emerge with a pair of scissors! So, before the Conference at Moor Park, in September, I wandered around my garden looking for foliage that blended with heathers and was amazed at how many I found; then I searched for small flowers, and lastly I picked heathers. From this collection I arranged a tiny basket, (so handy to take to friends in hospital), a round table centre with a candle in the middle, and a box. Most of us have a family heirloom, and lined with a "freezer" container no harm will befall it.

A tall candlestick – a copper or brass one is superb for the foliage heathers with a brown candle; and pewter, using mauve purples, ivy and grey succulents with a magenta candle is most unusual. A flat cooking dish made a charming wild garden, using a piece of driftwood on a pin holder with ferns, grasses and vivid heathers low-down. Four pebbles scattered in the water completed the picture. Lastly I arranged a large urn using only green, white and yellow. The effect was delightful – Calluna

'Serlei' coming right into its own together with 'Golden Feather'. One or two Iris leaves gave height and periwinkle and variegated honeysuckle a soft outline.

These ideas can be used the whole year round. I felt that even the men were surprised that so many different arrangements could be made with so few heathers. So ladies, go to town with your foliages and discreetly add the heathers – they will never be missed!

لامتختما

Mostly Erica maderensis and Daboecia azorica

D. A. Richards, Eskdale, Cumbria

For years I have had a special interest in Daboecias and have seen them growing in profusion in the Basque provinces. They vary considerably and in the garden varieties, but the scope was vastly increased when David McClintock sent me some hybrid seed. The variety of form contrasts with *D. azorica* grown here, when it is indeed of pure stock. It seemed to be high time that someone had another look round in the Azores, the only

place where the latter grows wild.

Like a bolt from the blue, in 1974, came an invitation from David to join him in a heather hunt in Madeira and the Azores. This was an opportunity that could not be missed. The main object in Madeira was to find *Erica maderensis* described by George Bentham in 1839 as a variety of *E. cinerea* and known practically only by old dried specimens. In the Azores we wanted some *D. azorica* variations on the known theme. David did the preparatory work, including establishing contacts with English settlers familiar with the herbage in each place.

I have visited most of the mountain areas of Europe, but Madeira is more precipitous than I believed possible. Cliffs of over 1,000 ft. are common. There is only one beach on the island and that is of black volcanic ash.

The roads are excellent; in fact one can drive to the top of the Pico do Ariero at 6,000 ft. Major Pickering, our local contact, took endless trouble on our behalf.

On our first trip into the mountains he indicated a shrub by the roadside which 'might be what you are looking for'. It was indeed, with flowers near white to fawny or purplish pink, much like a paler version of E. terminalis. E. maderensis appears to have more in common with the tree heathers than E. cinerea, in fact I could not tell the difference between seedlings of it and the local E. scoparia. This first plant was growing at 4,200 ft., in subsoil where the bank had been cut away at the side of the road. The biggest plants we found were bushy, 1 or 2 ft. tall, on ground that had been cleared at the edge of a wood, and sheltered by it. On the bleak top of Pico do Ariero it is quite common as tight cushions or mats draping the rocks. Some of these plants are ancient with a main stem thicker than one's thumb and close pressed to the rock up to 6 ft. across. One was detached and kept as it looked dead, but at its tip were still leafy shoots. We never found E. maderensis growing in competition with any other plant, but it survived on the bleak, rocky mountain tops where practically nothing else could find a living.

We searched extensively for *E. cinerea* because there was a specimen among the material collected by Lowe, but although many sites appeared suitable, we did not find any, nor has anyone else succeeded. There is plenty of cloud in these zones of the mountains, but we saw no rain. Water is scarce and is trapped high in the mountains by deep gutters, or levadas, and taken by them to the fields. Walking by a levada will often give an easy route to places in the mountains that would otherwise be

inaccessible.

Although wherever possible the ground is terraced and cultivated right up remote mountain sides, over miles of mountains *E. arborea* and *E. scoparia* are dominant and form *Erica* scrub. Some bushes are of great age and the bole of one *E. arborea* was 37 in. in circumference 4 ft. from the base. The authorities have gone to great lengths making footpaths in some of the

grandest scenery; and to give a slight feeling of security they use rustic fencing made from tree heathers. It gives a hard wood that needs no preservative. The grapes for Madeira's famous wines were grown in clearly defined areas, often very exposed, near the coast. They are in small terraced fields, protected from the gales by big screens or hurdles of tree heather. (The commonest crop is bananas.) Madeira to me felt compressed and congested, and in few places could one move freely about, though if we found nothing else, the trip had been

wonderfully rewarding.

The Azores are still volcanic but they are so much more open and the mountains more bare. From our hotel at Horta, on Faial, we looked east across the sea to the massive bulk of Pico, at 7,700 ft. the tallest Portuguese mountain. The side slopes gently at first getting progressively steeper to give it a typical volcano shape, and the clouds clinging to its sides make it a most impressive sight. The little ferry crosses the turbulent channel to Madalena on Pico island in a little over half-an-hour. We found a driver prepared to take us as far as possible. For anyone physically fit it is practicable to climb the mountain and return in time to catch the ferry back, although the guide book and friends suggested spending the night in a cave some way up. The weather was perfect, and after climbing for a couple of hours we had our sandwich lunch. Soon after this we climbed above the Erica azorica scrub to a region where Daboecia azorica was one of the commonest plants.

I am no aspirant for Olympic honours, so I elected to take all the spare baggage while David went scrambling higher. I preferred to work across the mountain seeing as much *Daboecia* as possible with high hopes of finding colour breaks. He soon disappeared over a ridge when I just, and only just, heard him call. I laboriously scrambled up and there was first a very pale pink, then several white Daboecias. I could hardly believe my eyes. Once again he headed higher, (where he found another white patch) whilst I got busy, first with camera, then with trowel and plastic bags, but it was chiefly cutting

material I took. I even took damp peat to pack them in. The height was 4,650 ft. The following day I found a third solitary plant of white *Daboecia* on the Caldeira, the 4,250 ft. peak on Faial island. It was just 2 in. tall and 4 in. across.

In England *D. azorica* forms dense bushes some 8 in. across. In May and June there is a blaze of red-purple blooms and then an odd bell or two during the summer. In the Azores they form stunted, straggling, carpeting plants at their best in late June and July. Buds, flowers and unripe seed heads were all there in mid-July. We saw many different shades of flower colour.

The local tree heath, *E. azorica*, sometimes grows with the hydrangeas widely used as hedging, and forms a pleasing contrast. Some shoots on the *E. azorica* showed considerable young growth, others little or none. Apparently after profuse flowering the energy is channelled

into seed and little growth is made.

On our way home we landed at Ponte Delgada, on the island of San Miguel. We had a few hours so we took a taxi to Furnas, on the eastern side of the island. It is famous for its hot springs and lies in a vast volcanic crater. As we started to descend there was heathland with Calluna showing a lot of foliage variation, and then seeding Gunnera tinctora with its gigantic leaves. At the bottom, by the side of the road, there are violently boiling pools among the rocks. On the rocks are sulphurous deposits and with the steam is the smell of sulphur compounds. Different springs vary even over a small area. One patch that looks like a quarry bottom has many quiet little springs bubbling away with different coloured deposits round them, some green, some yellow, some red. On higher ground pleasant gardens are laid out that contain a wide variety of wild Callunas. The smallest are like patches of moss, but many were over 4 ft. tall. The colour of their stems and leaves was also very variable and their flowers were generally pale in long elegant racemes but few were fully out. Several were flourishing right in the steam from the springs, and we found vapours coming up through crevices under other clumps.

That night we were in Lisbon and the following night I was back home in Eskdale. Most of the next day was spent very, very sleepily putting cuttings into boxes. I thought that I knew most of the answers with cuttings. Certainly the Daboecias were stunted and many of the cuttings minute, but only one in a thousand rooted. Usually I find Daboecias just too easy. The explanation may be that we collected branches. The hormones from the tips used as cuttings, may have drained down into the separate main stems, which were discarded. Next time I shall pack ready prepared cuttings to bring back. I had small hopes of the E. maderensis with thin hard stems that had been stored in the heat for far too long. They were slow but fairly easy. One stunted, yellow leafed plant growing in a sun baked crevice yielded two cuttings that rooted, (and grew into perfectly normal green leafed plants). After their first, very mild winter, I have something of everything that matters. Many of the Daboecias flowered in the Spring and then stopped, as they did in this country.

P.S.—E. maderensis was raised to a species by Bornmüller in 1904, an obscure fact few if any seem to have

noticed, and he gave no reason for so doing.

Personally I attempted no cuttings, as I was off again almost at once, to Stirling, Ireland and Wales. But two professional establishments were sent material as well. The tally of what survives there is awaited, and will not be fully known, flower colours etc. until at least 1976. But at home I have two bonny plants of *E. maderensis* (plus two seedlings from earlier seed, one of which flowered in 1975), one of *E. azorica* and four of *D. azorica*, all flourishing, but none flowered this year. In due course comparison will be made of the material each of us has to decide what should be propagated and so on.

E. maderensis is being specially studied with the help of Mr. Ross, the Keeper of Botany at the Natural History Museum, and plants are being grown at the Chelsea Physic Garden, and their pollen examined. The plant clearly has nothing in common with E. cinerea, but

seems to be closer to E. terminalis, but its pollen differs. Incidentally we saw very few seedlings of it in the wild –

rabbits don't help!

The forms of *E. scoparia* in mainland Europe, the Canaries, Madeira and the Azores each seem distinct from each other, although obviously closely allied. The Azorean plant has been formally placed as a subspecies of *E. scoparia* (although one refers to it for convenience as *E. azorica*), and almost certainly the other two island, or archipelago, taxa should be similarly treated, the Canaries' plants using their existing varietal name of *platycodon*. Young plants or pressed material of this species from anywhere would be welcome for this enquiry please.

D. McC.

Karteral

Rooting of Heather Cuttings

H. van Daesdonk

Reprinted from "Ericultura" No. 18, Winter 1975 by the kind permission of The Dutch Heather Society.

Mr. van Daesdonk explains his own simple easyto-follow method of propagation which he claims every amateur can follow in his own small way.

Materials required

- 1. A cold frame under glass, free from draughts, any size is suitable.
- Some plastic or wooden boxes, between 5 and 8 cm. high if one does not want to set the cuttings directly in the bed.
- 3. Garden peat of a good quality and preferably old.
- 4. Coarse sand, free of chalk and salt, such as builders use, or silver sand; this aerates the medium, while the peat fixes the pH.
- 5. Eventually, a small sieve with 4 to 5 mm. holes.
- 6. Sound material to take cuttings from.
- Name tabs or other means of keeping the cultivars recognisable.
- 8. A lot of interest, a little patience, and some care.

Position of Cold Frame

The best position is a north-facing wall with as much light as possible, failing this, any other position is suitable, except under trees. If in the sun, screening is absolutely necessary and an easy but not ideal way of achieving this would be by chalking the glass.

Medium to use

The easiest method is to use boxes, little tubs or pots, rather than a bed because preparation can then be carried out in small quantities, and changes and control of disease can be effected without having to remove the glass for a long period. It is an advantage to have gravel or peat on the bottom of the bed to stand the boxes on as this helps to maintain moisture control.

If it is not possible to use boxes, a permeable medium in the bed should be used, such as sandy soil. If on clay, a layer of gravel, potsherds or similar medium may be necessary. This can be covered with a top layer of 5 cm.

of rooting medium.

A good mixture is four parts by volume of peat to one of sand. Dry mixing by sieving is easiest. Moisten to a crumbly substance and press well into the boxes especially into the corners. Scrape with a stick to obtain an even surface and cover with a few millimeters of pure sand to keep free from algae.

Time of Cutting

Erica carnea and its hybrids are taken in June/July; all others in August but, depending on the weather, the material may be ready earlier.

Method of Cutting

New shoots grow on the old branches of *E. carnea* and its hybrids after flowering and it is these which should be used for cutting. It is important to wait until they are sufficiently ripe when they can be pulled off the branches with a small heel attached.

The cuttings can then be planted in the medium.

The time of ripeness differs between cultivars. Ideally, they should be neither too soft nor too hard; a too hard shoot is more difficult to strike than one which is too

soft. The tip should be nearly full-grown and taken just before the buds set, some time between mid-June and

the end of July.

Some Callunas have little side shoots which can be pulled off with a heel and planted into the medium. In others, the top or middle pieces can only be used. The best place from which to take cuttings is just above and below the flowers.

It is advisable to take more cuttings than are required, to cover possible losses, as it is difficult to determine

exactly the correct stage of ripeness.

Length of Cutting

The ideal length of cutting is $2\frac{1}{2}$ -3 cm., although even 1 cm. could succeed. For tree heathers, the length should be between 5 and 10 cm.

Preparing and setting

There is no need to remove the lower leaves. The cuttings should be planted deep enough to stand firmly. Holes can be made with a match if the shoots are rather soft.

After planting, firm the medium around the cutting and spray well with water. Captan 0.3% can be sprayed on to avoid mould forming should the weather necessitate this, or if watering and airing cannot always be done at the right time.

Distance of setting

A finger apart, or 2 cm., is best for the amateur. The wider apart the less damage in separation after rooting has been successful. The mass of young root formation depends on the variety planted.

Duration of rooting

This also depends on the variety, and other circumstances, and will take between four and ten weeks. *E. vagans* and *E. terminalis* may take more time and attention.

Treatment from cutting to plant

After filling the bed, the glass can be kept on for the first three or four days. After that, open it daily to let in fresh air.

Take care that condensation does not always drip on the same plants when the glass is lifted. Regular control of moisture is imperative. Too wet is worse than too dry.

After some weeks the tips start growing a little, a sign that rooting has started. After some time resistance against pulling up will be noticeable, to be tried very

delicately.

When rooting has fully started, air a little longer each day, guarding against wind.

In frosty or snowy weather a cover is necessary and

some sort of shelter against sun is always needed.

After mid March the glass can be taken off on a sunless day, but keep it handy however for sudden frost

at night.

At the end of April, when the cuttings are sufficiently strong, they can be planted in a nursery bed or even in the garden. Another method is to put the cuttings that are well rooted separately into small pots. The soil again should be four parts peat to one sand, or two peat, two leaf compost or forest topsoil and one sand. These pots should be dug into the bed under glass, with their brim covered to keep them moist.

Hormones

When setting cuttings in the season mentioned above, hormones have not proved to be effective. Out of season, and with harder cuttings, light hormones may be useful, but their application requires considerable experience.

Our Experiences of using Mist Equipment

D. J. Small, Ipswich, Suffolk

It all started in 1964 when we used to use the jam jar method of propagating a few cuttings. Sometimes we obtained high yields other times none at all. It was all so uncertain. We started to wonder how heathers were

propagated commercially and discovered mist propagation. At that time we thought all major nurseries used mist but of course, since we have found that this is not so.

Always being interested in electronics, I built our own mist control unit, installed it in a cold frame and immediately we had success with a wide range of cuttings. The only trouble was that the home-made 'electronic leaf' was unreliable. We spent the next few years trying to perfect it but eventually gave up and bought a proprietary one. Unfortunately we found this to be no good with our mist control unit. The unit was too sensitive. We persevered in producing our own and we now have a very reliable leaf. The original mist unit used to get wet from time to time so after a while it had to be replaced.

The next design was more sophisticated, involving light measurements as well as the 'leaf'. It also had two sensitivities which we found to be invaluable later. We progressed to a greenhouse, only to find that initially it did not give such good results. The greenhouse rapidly became white due to lime being deposited on the inside of the glass. It was also very difficult to remove.

It was about this time we became very interested in Cape Heaths. Propagation of these presented a challenge. They tended to take longer to root, by which time they were white with lime.

Next we invested in a water de-ioniser, a type of water softener. This solved the problem of liming but brought with it another. Tiny brown spots would appear on the leaves of cuttings and the Cape Heaths which were being watered by mist. We did not know whether this was due to acid water produced by the de-ioniser or by copper poisoning from the piping. When we moved to Suffolk, the piping was changed to plastic and at last all our problems were over.

Was it all worth it? We think so, and will still go on perfecting a propagation technique, which we firmly believe gives stronger cuttings with a good root ball more quickly than any other method.

A review of Mist Propagation Equipment

D. J. Small, Ipswich, Suffolk

Propagation is a subject which interests most of us at one time or another and there are many ways in which it can be done.

The basic aims in most methods should be to keep:a. the bottom of the cutting at around 70°F to

encourage rooting

b. the rest of the cutting as cool as possible to ensure that food reserves are not quickly depleted

c. high ambient light conditions, which enables the photo-synthetic process to operate at maximum efficiency.

However, high light conditions e.g. sunlight, often bring high air temperatures as well. This is why I believe best results in non-mist propagation methods are often found either by placing the propagator in light shade or by taking cuttings around September/October so that sunlight does not increase the air temperatures markedly.

When water evaporates from a cutting it has the effect of cooling it. Therefore, by intermittent misting, it enables all the aims mentioned above, to be achieved. Although misting can be done manually, there are obvious advantages in automating this process. The propagator can be left unattended for long periods and cuttings can be

taken all the year round.

There are several types of equipment which do this.

i. Probably the most common is the 'electronicleaf' type, in which two rods of carbon mounted in an insulating medium, are placed amongst the cuttings. The electronic equipment detects when the 'leaf' is dry and operates a solenoid valve. Water is passed at high speed through a small hole and is then rapidly stopped by a striking pin. The result is that water is smashed into very tiny droplets i.e. mist. The equipment detects when the 'leaf' is wet and switches off the solenoid valve. This method has drawbacks in all year round propagation and in hard water areas, due to

the liming up of the 'electronic leaf'.

ii. Another method measures the light level and operates the solenoid valve after a certain quantity of light has been measured. This method is more reliable in hard water areas, as it does not use a 'leaf'.

iii. Yet another method uses a fine balance. On one side is a microswitch which operates the solenoid; on the other is a sponge which absorbs water as the cuttings are sprayed, becomes heavy, tripping the microswitch. As it dries out, the balance swings the other way until the microswitch is operated again. This method is not so sensitive when very small quantities of mist are required e.g. when rooting Calluna 'Silver Queen'.

iv. A fourth method uses a control strip mounted between stirrups that is sensitive to moisture, causing it to flex and operate a microswitch. The tensioning of the strip alters the length of time

of the mist burst.

v. Finally, more sophisticated equipment is being developed, which monitors soil temperature, soil wetness (an important feature in all year round propagation), air temperature, leaf wetness and light level. These variables are computed to determine the periodicity of the mist.

Both low voltage and mains-operated versions exist for most of the methods mentioned above. It cannot be stressed too strongly that water and mains voltages can be a lethal combination; so if you are considering such an installation, do consult a competent electrician.

(COO)

On with the Motley

Gerda and Richard Chatelain, Orpington, Kent

Old established favourites such as Calluna 'H. E. Beale' or 'Silver Queen' need no recommendation from us but other, in our view equally attractive

varieties are less well known and a brief note on our experience with them may be of interest. We have however only a small garden and our observations are based on a few plants of each cultivar.

By far the biggest group is formed by the Callunas and we hope that the Society's publication on the Harlow Car trials will remove some of the uncertainties of nomenclature which undoubtedly exist. A fine cultivar not widely available is 'Anthony Davis' with its silvery grey foliage and long sprays of white flowers which last for many weeks. In fact, it earns a place both as a foliage or as a flowering variety. 'Inschriach Bronze', so accurately described in the Guide, is another outstanding plant and for those who like red coloration 'Bud Lyle' is worth a place. This is a small plant, but the entire colour is a deep red at a time when other cultivars, e.g. 'Wickwar Flame' are showing yellow and 'Bonfire Brilliance has not assumed its winter colour. There are so many foliage cultivars that the choice is not easy, but 'Arran Gold', well known to all who attended the Stirling conference, and 'Gold Turret', an upright bright yellow plant are useful additions to the list.

There are several late-flowering Callunas available but this year we have acquired 'Autumn Glow' whose buds are now only opening as 'Finale' goes over. Unfortunately on our plants at least, the flowers are directed downwards which will detract from the appearance. When we visited Herr Westermann in Germany recently, he bestowed some plants of 'St. Nick' on us, so named because it is said to flower on St. Nicholas Day. At the time of writing, late October, the plants are still in tight bud so they may live up to their name.

'Lady Maithe' is a nice plant, similar to 'Mrs. Ronald Gray' but more floriferous, at least with us. 'Torulosa' first seen in Mr. London's fine garden is also excellent with its attractive growth form. 'Fairy' is a beautiful plant and we are convinced that in the early Spring it changes its dress almost daily. Some of the St. Kilda heathers, for which we are so indebted to Mr. Brien of Pitcairngreen, are also most attractive. One of several

other fine plants from him is 'Braemar', its white flowers

born in profusion.

Comment on the cinereas is not easy because we suspect that so much depends on the cultural treatment they receive as well as the source of supply. We have two entirely different stocks of 'C. G. Best', one having long sprays and the other short. We had assumed that the latter were merely wrongly labelled, but were interested to find two types growing at Wisley. Both share the brownish tinge to the foliage which occurs in the autumn. Flowering times are also variable with us; one year C. D. Eason' goes over with great speed, in another it blooms throughout the summer. One member of the species which we find attractive is 'Glencairn' which has delightful red tips to its new growth as well as an attractive flower. 'Domino' is well known but not always easily obtainable. We were slightly disappointed with it until this year when it was smothered in a mass of bloom and made a delightful contrast with 'P. S. Patrick'. At the other end of the colour scale is 'Contrast' with flowers even darker than 'Velvet Night'. Add to these the pure pink of 'Sandpit Hill' and the red of 'Glasnevin Red' and one has some indication of the wide range of colours for which the cinereas are unbeatable.

E. vagans, it must be admitted fills us with less enthusiasm and we tend to the view that when one has said that there are three main colours there is little to add except for detail about exact time of flowering etc. A notable exception is, of course, 'Valerie Proudley'. Dare we say also that we find most of the summer

hybrids much of a muchness?

The carneas are one of our favourites, not only because of the magnificent show that they give when the rest of the horticultural scene is resting, but also because of their compact growth and their foliage varieties. An excellent newcomer is 'Adrienne Duncan' for which we are indebted to Lt.-Col. Stitt. The plant is a sturdy grower and the fact that it is superior to 'Vivellii' is sufficient accolade.

There are several species we have not covered. Perhaps someone else with a larger garden can comment on a few of the newcomers such as *E. lusitanica* 'George Hunt' and the new *E. erigena* cultivars. No doubt many readers will disagree with some of our remarks and if this note serves to generate further correspondence, then it has at least served some purpose.

الحنجنعكا

Book Reviews

HEIDEPLANTEN EN HEIDETUINEN,

by W. HAALBOOM. 56 pp. Illustrated, Thieme, Zutphen 1975. Dutch Guilders 8.90.

Some of us have had the pleasure of meeting the now elderly author of this paper-back, who is the owner of a large Dutch nursery. So his advice should be based on long experience. The book is well laid out too – advantages of a heather garden, layout, choice of varieties, maintenance, propagation, pests and diseases etc., with a 16-page annotated list of varieties, plans of four gardens, plus 16 pages with 38 photos, all in colour; surely there must be a demand for such a smaller, cheaper book, over here too.

Two matters however mar this one; most of the colour is dismal or at best out of character, and there are endless errors of detail, inconsistencies, misspellings etc. The latter could readily be put right by many a member of Ericultura; the former the publishers really ought to improve in the next edition. As it is, this is not a shadow of Mr. van de Laar's "Het Heidetuinboek" of which 10,000 had been sold within a year, and of which

the second edition has all the plates in colour.

AN INTRODUCTION TO HEATHLAND ECOLOGY, by C. H. GIMINGHAM. 124 pp. Illus. Oliver & Boyd. 1975. £1.75.

In our 1973 Yearbook, I reviewed Dr. Gimingham's Ecology of Heathlands and commended it to those who wished to know their heathers better, above all *Calluna*. This is now epitomised into under half the size, and I

think does the job even better for the less expert. Furthermore it is three years more up to date and with some coloured illustrations. The earlier chapters are particularly apposite, on *Calluna* itself, "a remarkable species", and contains much of basic relevance to what makes a heather happy. There are facts on its germination behaviour, seedling growth, its optimum age and degeneration. The discussions on grazing, and overgrazing, and fire, are relevant to pruning. The effects of its litter are gone into, which makes a poor seed bed, and indeed heath vegetation does not normally itself build peat. Heathlands, of which there is a map, cover a relatively restricted part of N.W. Europe, but *Calluna* itself extends much further south and east. In the more continental parts of Europe it remains confined to woodlands, persisting only where tree cover maintains a humid micro-climate for much of the year.

None of us would fail to learn something from this knowledgeable book, and very likely find it fascinating

as well.

DAVID McCLINTOCK

(4.00)

Reports from Local Groups

The addresses of organisers or convenors appear on page 62.

WEST OF SCOTLAND GROUP

As already pointed out in the Autumn Bulletin, we have arranged our diary of events for 1976 and this group is now firmly established, the pattern tending to be three illustrated lectures during the winter followed by two outdoor meetings during the summer.

M. BREMNER

NORTHERN GROUP

It was in 1969 that I started the system of chain posting a bound copy of the first four issues (1963/66) as a welcoming gesture to new members in Zone 3 with

an overflow to Zones 4 and 5. The 1967/71 bound volumes were added to the circuits during the years and, to date, over 400 new members have been welcomed to our midst in this way.

Initially, I had doubts as to whether the method would be acceptable, but the response from recipients, in their writing notes of appreciation and thanks, has been ample reward for the trouble of organizing the circulations. These arrangements are now being extended; Zone 5 is being catered for by Mr. D. B. Oliver and Zone 7 by Mrs. G. G. Lee. Other Zones are seeking volunteers to provide this service.

The main obstacle will be that too few bound copies are available, especially the early years. If any members can bear to part with their old issues, the Society would be most grateful to have them. If you have any acquaintance with no-longer-members, can you retrieve old issues which might otherwise be thrown away?

I suppose many of us have joined this or that Society and our membership has remained quite impersonal. Contrast this with receiving the loan of our interesting Year Books, "quite out of the blue" which many have expressed as "a delightful surprise" and moved one to write "It made me really feel that I was part of the Society". Of other comments the most frequent has been appreciation of propagation details (Y/B 1966 & 70 and Bulletin No. 1). Others have suggested reprinting, and praise has often been given for the quality of the contributions.

By posting from member to member, the postal cost is cut to one way only and the one difficulty which arises is when a volume gets held up inadvertently (often for understandable reasons) and it is tedious and expensive to write and telephone to trace. But it is important because these books are out of print and valuable. So will recipients please post along to the next address as soon as reasonable possible? At best, it takes six months for a rota of eleven addresses to go round, for re-circulation to another list.

THE MIDLANDS GROUP

After only two years the Group seems firmly established although on a most informal basis. We held meetings in Friends Meeting House, Birmingham in February 1975 and again in November, when Library and members own slides were projected; and of course we found plenty to talk about. In April and July we met in members' gardens in Little Hay, Sutton Coldfield and Draycote.

All these meetings have been or will be reported in the Bulletin. The notable thing is that about 30 members have been meeting regularly and obviously enjoying the opportunity of discussing heather growing with likeminded enthusiasts. However there are many more members in the Midlands area, and we hope that more of them will join us next year. Any member of the Society is welcome, but please note that the only notice of meetings is that given in the Diary of Events in the Society's Bulletin.

NORFOLK GROUP

A very full year well supported by 25 members, including visits to member's gardens and an active interest in local shows. The group earned the warm thanks of the Secretary and Staff of the Hellesdon Hospital for the display of heathers at their show on the 13th September. A month earlier, at the Cromer Show, Mr. London won the W. G. Hurst Heather Bowl with first three prizes for cinereas. Former Year-Book editor Mrs. Pamela Harper on leave from America was present at our June meeting and David Small at our late September meeting, who brought along splendid plants of Cape Heaths and Callunas which were sold to aid funds.

B. G. LONDON

WEALD & THANET GROUP

During the year it was decided to extend the Weald Group. which covered West Kent and East Sussex, to include the remainder of Kent. Accordingly, a newsletter was sent to all addresses in the new area inviting members' participation in Group activities. One garden visit was held. It followed the previously successful arrangement of including two gardens in the same district on the one day, this time in Crowborough, the hostesses being Miss Janet Longstaff and Mrs. Edith Godbolt. The Group was joined by some members from the Mid-Southern Group. This neighbourly visitation added greatly to the enjoyment of the occasion.

As a trial, and to test members' reactions, the Group has produced, from black and white drawings by Margaret Woods, notelets in two designs. Experience with this venture will be reported in the next Bulletin.

Members in the area who have not received the newsletter mentioned above, but would like to join, should write to me.

EDITH GODBOLT

MID-SOUTHERN GROUP

Following the inaugural meeting of the Group in August, which was fully reported in the Autumn Bulletin, we were invited on November 29 to visit Brigadier and Mrs. Charles Smith's garden in Farnham. It looked beautiful in the bright sunshine, which shone for us following days of downpour. The garden has the most artistic setting, open and expansive, yet rich in trees, as the ground beyond drops to a grassy valley where oaks can be admired without their shading the heathers. Brig. Smith's fine collection of dwarf conifers and shrubs were also much admired before the party moved indoors.

We were honoured to have as Guest Speaker Mr. John Clayton, the Public Relations Officer of the R.H.S. Garden at Wisley. He brought some of the splendid collection of slides he has taken himself throughout the seasons in the now discontinued trial grounds and in the meticulously maintained Garden itself. In the informal atmosphere of the afternoon, Mr. Clayton, who has been at Wisley for nearly 20 years, good-naturedly encouraged an exchange of comments with some of the 23 members present, as various heather slides were shown, and gave us wonderful examples of how some of his – and our – favourite plants should be grown.

Following a vote of thanks from the Chairman of the Heather Society, a most delicious home-made tea was produced by Mrs. Smith who made us all so very welcome. It was a great pleasure to renew acquaintances and make new friends having the same interest and we were reluctant to leave. However, we look forward to March 21st when we will see how Mr. Brian Malin tackles the problem of growing heathers "in spite of chalk" at 88 Findon Road, Worthing, 3-6 p.m.

PAMELA LEE

SOUTH-WEST GROUP

The Heather Society's Zone 8 is a very large area to cover. The organisation of local activities was likely to be difficult. However in September 1974 I wrote to about seventy members to measure potential interest. I received about forty replies, half of which expressed interest.

Our first meeting was held at Queen Camel in Somerset on April 5. Twenty people from as far afield as Poole, Exeter and Devizes turned up on a snowy afternoon to get the section started. Since then we have visited Mr. Edge's nursery at Ringwood for a propagation meeting and on November 29 we returned to Queen Camel when Mrs. Hayden gave us an extended version of the talk she gave during the Conference at Farnham in September.

It is our policy to hold meetings in different parts of the region where possible. For the Spring and Summer in 1976 three venues have been chosen, details of which will be given in the Bulletin when arrangements have been finalised.

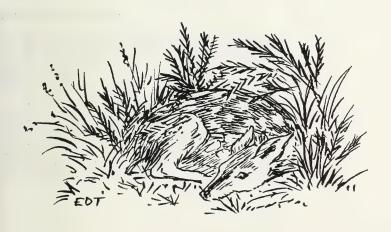
A. W. Jones

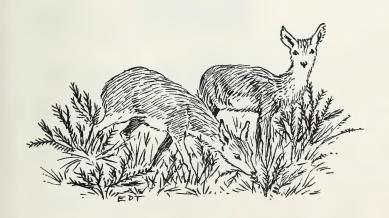
(4.4.2)

Heather and Wildlife

Mrs. E. D. Strover, Farnham, Surrey

Heather is helpful to wildlife in several different ways, for refuge, for homes and for food. Last year a Hedge Sparrow built its nest in a heather and brought off a family successfully. Years ago, when our trees were not so





See "Heather and Wildlife" Page 34

A PAGE FROM THE HEAT

						۰.
Row No.	Colour	Cultivar	Height mm.	Spread mm.	Flowe From	9
12	75A	R. B. Cooke	180	450	Mid Dec.	ad ay
12	75B	Pink Spangles	170	450	End Jan.	nd ay
11A	75B	James Backhouse	160	380	End Dec.	nd lay

Erica vagans

Birchglow - Fiddlestone - Mrs. Maxwell difficult to Differentiate
Is our Mrs. Maxwell correct? Get authentic plants from Dartington.

Erica carnea

White Glow, Springwood White, Vivellii March Seedling and Pink Spangles outstanding King George and Winter Beauty not correct check with Kew Gardens and RHS library

Winter Hybrids

Silberschmelze and Furzey outstanding

ATECR TRIAL NOTE BOOK

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eri i	Spike mm.	Foliage Colour	Amount of Flower	Habit	Garden Worthiness
ldi Lyy	60	Mid Green	Excellent	Good Spreader	Good
ldi Ly	50	Mid Green	V. Good	Good Spreader	V. Good
ldi lyy	50	Mid Green	V. Good	Loose Spreader	Fair

Calluna vulgaris

C. W. Nix Alportii Darkness

All 71B.

Ross Hutton

Beechwood Crimson

Erica cinerea

Vivienne Patricia	80B
My Love	78B
Newick Lilac	78B
Cevennes	78C
Hookstone Lavender	78C

Daboecia

William Buchanan great favourite with recording team.

E. umbellata

Magnificent on 5.5 pH and at 650 ft. above sea level.





See "Heather and Wildlife" Page 34

tall and had an undergrowth of heather, we had Nightjars here every summer. Once I nearly walked past a sleeping Fallow Deer fawn in a bushy heather hollow without seeing it. Since then I have done a large oil painting of it from memory, and sold it! Grouse eat the tips of heather and deer also eat it in hard weather. And, of course, bees make the very best honey from heather.

One evening I was out Badger-watching, waiting for them to come out from their sett, when I saw a Fox walking towards me. I said aloud: "Oh you poor ltttle thing, you do look ill". It walked right up to me and stood and looked at me as though it was asking for help. Then it turned and crept under a bush of old heather and rubbed its back from side to side on the hard stalks. It obviously had a bad attack of fox mange. Then it sadly wandered away. Sometime later a fox came into the garden, and one of my collie dogs played with it, and caught mange, and it took quite a long time to cure.

Birds build their nests by instinct. That is, each bird builds its nest like its parents did without ever being

shown how or taught.

The pigeons use twigs, the tits moss lined with feathers. The Long-tailed tit uses so much moss mixed with cobwebs and lined with thousands of feathers one wonders how it can find so many. The Thrush builds with dry grasses and lines its nest with mud. The Blackbird uses grass and fine twigs and does not line hers. How did the different styles of nest evolve? Why did the Thrush think of using mud when its cousin the Blackbird did not?

One occasionally finds a bird with original ideas or feeling for beauty. Can one be sure that birds and animals cannot "think?" Of course the Tropic bird builds a bower of all sorts of bits and pieces, but that is in the tropics where things are different! Does that sort of thing happen here?

I used to keep French doves. Lovely bright brown birds with crimson beaks and feet. They used to drape themselves all over the rock garden, sun-bathing, and were most decorative. They increased rapidly, building their

twiggy nests side by side in their house which stood in our verandah. One year two nests were built, the usual loose, untidy nests of twigs. Then one dove thought its nest was dull! Each day it picked a flower and tucked it in amongst the twigs. A spray of aubretia, a stalk of alyssum and bits of heathers, red ones, pink, crimson, mauve, purple, white, surely this bird has an artistic sense. As the flowers faded they were removed and were replaced with fresh ones. It was interesting to look into the dove-house and see one bird sitting on twigs and the other surrounded with a flowery wreath.

Another year a Blackbird had almost the same idea, only it used green leaves. Various kinds were picked and tucked in to the nest-edge. Finally it picked or found a laurel leaf, much too large and difficult to use in its nest. At last it somehow managed to secure the leaf stalk and the large leaf hung down the side of the nest making a good protective colouring scheme to the whole structure, especially as the bird had built in a rhodo-

dendron bush.

It is extraordinary how heather in flower can be a protective colouring. In Scotland in the summer the hills are solid pink, and yet a group of Red deer are hard to see if they are lying deep in heather. I thought once what a queer bunch of branches in the heather, and then as I watched they rose and I realised they were the antlers of some resting Red deer stags.

Karton X

Harlow Car Heather Trials

G. P. Vickers, Dinnington, Yorkshire

For the past eight years a small but dedicated team of Heather Society Members has set about the tremendous task of examining in detail and recording the growing habits of most of the heathers in cultivation.

The project was started in 1967 when John P. Ardron, one of the Vice-Presidents of the Society, realised, from his own observations and the written comments of others, that there were too many heath cultivars which

were so similar in their habit that they were virtually the same. It was resolved that records should be kept over a number of years on height, spread, flowering season, flowering spike length, flower colour (by R.H.S. Colour Chart) and foliage colour. They would help us:-

1. As the registration authority for heathers produce our authorative list of cultivars.

2. To highlight the differences between cultivars.

3. To publish a list of choice cultivars.

Initially, recording was started in the Heather Garden at Harlow Car the garden of the Northern Horticultural Society at Harrogate, but after some time it was found that this method was unsatisfactory for the recording team because plants were set out for effect rather than scientific observation. A half-acre field next to the nursery at Harlow Car was loaned by the N.H.S. and plants obtained from Society members or propagated from the Harlow Car stock.

In 1969, 360 varieties of one year old plants were set out in rows suitably labelled and a new set of records began. A wooden hut purchased from a legacy of Fred Chapple made recording more comfortable and housed the record sheets. A carved commemorative plaque to our first President is mounted on the outside wall.

All who love heathers should be grateful for the meticulous care taken by Mr. V. Russ and the recording team composed of keen interested housewives and retired business men. Recording has gone on in all weathers at two weekly intervals over the past four years, taking, as a conservative estimate, some 1,000 man hours of work. To this must be added the many hundreds of hours of auxiliary work of writing up, organising and committee meetings by a variety of different people. Another volunteer team have moved in to keep the trials area clear of weeds, to free the recording team of this task. The project has cost several hundred pounds but this has been raised by donations and from the sale of plants and has not been a drain on Heather Society funds.

Heather Society members should make a pilgrimage to the trial grounds, there is always something exciting to see and learn. (They should contact Mr. Russ before

doing so.) This is an important piece of original work; never before has a species of plant been investigated quite in this way and the quality of the results indicates the dedication of the recording team.

Over the years, a group of acknowledged expert heather growers has met at the flowering season of each variety and checked that the plants are true to name. The fact that this has been in some cases very difficult, bears out the original thought that there are too many cultivars with a similar habit.

The height and spread recordings in 1975 are very similar to 1974, which indicates that growth is slowing down; and as other recordings have repeated themselves it is now considered that recording is complete for the initial 360 varieties and that preparations can be made for publishing the results. To this end, information has been taken from the recording sheets and summarised by flower colour and from these the recording team has selected those plants which they consider the best.

When discussing publication with Heather Society members in different parts of the country, a note of caution has been expressed because of the possible effects of differing soil and climatic conditions. To check this, a long-term member's trial has been started with cuttings from the Harlow Car clones being grown into plants for distribution to members who have room in their gardens and the time and interest to take the necessary readings. Soil samples from each garden are being tested by the technical committee on a pH meter and an assessment made of the soil texture, so that all likely factors affecting growth can be collated. But it will be four or five years before these findings can be added to the Harlow Car results.

An important feature of the trial has been the investigation into the effect of pruning. To do this scientifically the two outer plants of each group have been left to grow naturally whilst the centre three have been pruned annually, thus pruned and unpruned are adjacent for comparison. Annual pruning in general retards the flowering by two to three weeks but, extends the flowering season by a similar amount. Pruning produces a much

better looking plant all the year round particularly in respect of *Calluna*, *E. cinerea* and *Daboecia*. The double flowered *Calluna* group of 'H. E. Beale', 'Peter Sparkes', 'Elsie Purnell', 'Cramond' and 'Glencoe' look magnificent in full flower unpruned but a very sorry sight the rest of the year; whilst pruned ones look good in and out of season.

The grey foliage group, 'Silver Queen', 'Silver King', 'Silver Knight', 'Hirsuta Typica' and 'Oxshott Common' greatly benefit from pruning as the young growth which is stimulated by pruning gives a fresh feathery appearance

to the plant.

In 1975 another batch of one year old cultivars were planted for recording in 1976 and onwards and the original 360 varieties will be left for at least one year so that a photographic record can be made and the results checked if necessary. The plan then is to move the best plants to the Heather Garden in the Tarn Meadows at Harlow Car.

In some respects this will be a pity because at present not only have we a unique collection of Heathers we also have an excellent "Art Gallery" for all to see, with similar plants adjacent for comparison. The possibility of keeping the trial going as an "Art Gallery" for the general public to see has been discussed with the N.H.S. Director of Gardens but at this moment we can see no way round the dual difficulties of cost of maintenance and the nearness to the nursery area which is private.

When the results are published, the most important feature will be the full description, but the recommended list will cause the greatest interest. Individual heather growers will claim that their favourite plants should have been included, but all should realise that the results are the result of critical scientific survey by a number of thinking people who have observed a large number of plants over a long period and are considering one variety

in relationship with 359 others.

⁽A page from the Heather Trial Note Book at Harlow Car is reproduced on the centre pages.)

Oh! Jane-Why November?

Mrs. J. M. Stow, Flackwell Heath, Bucks.

Most months of the year we have heaths and heathers in bloom in our garden, but November is not one of them. So when our daughter told us that she wanted to be married in November we had a problem. Jane wanted to have our heather in her bouquet, also we

wanted some for floral arrangements.

I had thought of drying heather (indeed I had done some) but I don't particularly like it, so what to do? Then I thought of freezing it; most things freeze, so why not heather. I picked some Calluna 'Mairs Variety' and laid it in a plastic container, put the lid on and in the deep freeze it went. After three weeks I took out one spray, put it in the refrigerator for a few hours and then in a vase of water, it was as fresh as if it had just been picked.

Another container was then filled in layers with foil between each layer of Calluna 'H. E. Beale' and 'Peter Sparkes', both wonderful for arrangements, and into the freezer it went. After approximately eight weeks (four days before the wedding), this was transferred from the freezer to the refrigerator for a few hours before being placed in water in the cold garage until needed for the arrangements. The florist used 'Mairs Variety' for Jane's bouquet, and I used the rest for table decoration.

The heather lasted a good three weeks in a centrally heated house afterwards which I find is normal for freshly

picked heathers, also the colours were perfect.

العنجني

Poor mixed-up 'Rosalind'

D. J. Small, Ipswich, Suffolk.

As those who grow it know, Calluna 'Rosalind' is perhaps the nearest cultivar we have to a yellow-foliaged mauve-flowering heather.

Two years ago, one of our plants produced flowers

which were white on one side of the spike and mauve on the other side. Both the calvx and corolla of the bells on the dividing line were half white and half mauve

in perfect symmetry.

A cutting was taken such that part of the mixed-up spike was left on the plant. After what seemed ages, the cutting finally rooted, very much slower than normal 'Rosalind' cuttings, and then grew very much more slowly too.

This year, at long last, it flowered. About a third of the plant had mauve flowers and the remainder were white, with no half and half bells. We have now taken cuttings from each half of this plant to see what happens this

time

(Mr. Small is to be congratulated on propagating his remarkable shoot. He brought it to the conference and it was most striking. The phenomenen is called amphichromy and is of rare occurrence.

ED.)

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Heather Gardens: No. 2 Richmond Park

Major-General P. G. Turpin, Guildford, Surrey

There are two gardens planted with heathers in Richmond Park which are open to the public, the

Isabella Plantation and Pembroke Lodge.

The Isabella Plantation is reached from a point about halfway along the Park road leading from Kingston Gate to Robin Hood Gate, where a track, opposite a car park, leads down to the wood in the valley below.

Originally in the 18th Century the plantation was known as Isabell Slade - a slade meaning "a little valley or dell; a piece of low moist ground". Later, in the 19th Century, Isabell was changed to Isabella. Who Isabell or Isabella was is unrecorded, but it has been assumed that the name commemorates the wife or daughter of a former Ranger or Deputy Ranger of the Park. The plantation, now 42 acres in extent, was originally a woodland enclosure, used for many years as

a game reserve.

The wood, which was mostly planted in the middle of the 19th Century, consists mainly of oak and birch with some sweet chestnut, beech, ash and other trees, and it remained as a woodland plantation with bluebells and an undergrowth of rhododendron, bramble and bracken until 1951, when George Thomson was appointed Park Superintendent. Since then it has been developed into a delightful landscape garden with an extensive collection of Rhododendron, Azalea, Camelia, Magnolia and Heathers. There are three ponds with connecting streams and these provide ideal conditions for moistureloving plants. The chief glory of the garden is the show of Azaleas and Rhododendrons in the second half of May and the autumn colours in late September and October. George Thomson was succeeded by Michael Brown, the present Superintendent, who has plans for further development and improvement.

For the heather enthusiast there is something to see in most months of the year. Perhaps a most impressive sight is that of the banks of tree heathers, E. arborea, E. lusitanica and E. x veitchii, which in early spring provide a dazzling curtain of white blossom flanking the approach to the pond at the bottom of the plantation. Here, where the three streams converge, is an open space which has been richly planted with many species of heather. Most of the species which are commonly grown in this country are well represented, except for E. cinerea and E. tetralix, of which there are only a few varieties. The number of cultivars has recently been increased by the creation, during the winter of 1974/5, of three new beds, in which a mixture of summer and winter flowering heathers, including E. tetralix 'Alba Mollis' and 'Con. Underwood' and the E. watsonii hybrid

In addition to the tree heathers already mentioned

'Dawn', have been planted.

there are five or six cultivars of Daboecia, about as many of E. vagans, a few varieties of E. cinerea, E. terminalis, E. ciliaris and a very good selection of Calluna, single and double flowered cultivars, with carpets of 'Gold Haze' and 'Robert Chapman' providing the contrast of coloured foliage. There are bold patches of 'H. E. Beale', 'Joan Sparkes', 'Co. Wicklow' and 'Alba Plena'. There are a few clumps of Cassinia fulvida, the New Zealand plant often called 'Golden Heather', which grows well in company with the true heaths. In the winter months colour is provided by E. x darleyensis 'Silberschmelze' and 'Arthur Johnson' and E. carnea 'Springwood White', 'King George' and 'Vivellii'. In addition to the open area at the bottom of the plantation, great clumps of heathers have been planted along the streams, which connect the ponds and they blend attractively with the moisture-loving plants which grow along their banks.

The head gardener responsible for the plantation is Wally Miller, who successfully overcomes the eroding effect of the many visitors (and their dogs) who come to admire this jewel of a garden throughout the year. All the heathers planted in the Isabella Plantation are propagated in the nursery garden at Pembroke Lodge by Bert Mullins, who also supervises the heather garden at the back of the Lodge, where winter-flowing heathers and *E. cinerea* ('Hookstone White', 'Atrorubens' and 'Frances') predominate, with a mixture of foliage plants

of Calluna.

Pembroke Lodge, on the hill between the Richmond and Ham Gates, was originally the Park Molecatcher's Cottage and was later enlarged as the home of Elizabeth, Countess of Pembroke, the widow of the 10th Earl of Pembroke. She died there in 1831. To-day the ground floor has been turned into a public restaurant and snack bar and the surrounding gardens are open to the public, with many flowering shrubs, colourful arrangements of Begonias, Fuchsias and Pelargoniums and a fine view looking towards Petersham and Ham House and the River Thames above Richmond.

Preliminary note on a cross between Erica erigena and E. carnea

Mrs. Anne Parris, Usk, Gwent

Explanation.

For a long time it has been assumed that the nearly always apparent sterile, naturally occurring, E. x Darleyensis hybrids which have appeared from time to time were the result of crossing between Erica erigena and E. carnea. I refer to the well-known winter heaths 'Arthur Johnston', 'Darley Dale', 'George Rendall', 'Furzey', 'Silberschmelze', 'J. W. Porter' and 'Jack H. Brummage'.

Some years ago I wrote to Mrs. McLeod to ask if she knew which was the female plant. She referred the query to Mr. David McClintock. The following experiment was a direct consequence of his reply. It seems that the cross had never been confirmed, and I might be doing a

service if I could do so.

In 1972 I made a simple experiment. I tied a cut spray of *E. carnea* 'Springwood Pink', then in full flower, to the flowering branches of *E. erigena* 'W. T. Rackliff' and 'Brightness' respectively. Each spray was tied to the female plant with wool. The whole was then enclosed in a plastic bag. The bag was tied at the base around a wodge of cotton wool to protect the *E. erigena* from constriction or the entry of other pollen. For a day or so I tapped the bag occasionally to help release pollen from the *carnea*. Later in 1972 I harvested a few seeds from the *erigena* branches inside the bags. The withered sprays of the *carnea* had no seed as would be expected.

Returning after some months in Australia, I sowed the seeds in January 1973. Because the sowing was late for heaths, I kept them on the freezing shelf of the domestic refrigerator for nearly two months before bringing outside late in March. Some seeds germinated late in April, and were pricked into "Jiffy 7's". I managed

to rear three plants from the 'Rackliff' parent, and four plants from the 'Brightness' parent. These were planted outside in a row in the garden in the late Spring of 1974.

In May 1975 I was astonished and delighted to find that not only had the cross succeeded, but there were no selfed progeny from the *erigena* parents. I now realise that this was probably due to unhealthy condensation in the plastic bags, after the initial pollination by *carnea*.

The hybrids have none of the erect habit of *erigena* as shown in seedlings of 'Brightness' obtained on an earlier occasion. Nor have they the prostrate habit of 'Springwood Pink' (with one possible exception).

The young shoots are all brightly coloured as is the case with many of the natural hybrids, it could be that those from 'Brightness' more so than from 'W. T. Rackliff', but it is not definite at this stage. I could be wrong, but the colour of the shoots of the 'Brightness' offspring in particular appears to resemble the 'J. W. Porter' hybrid rather than 'George Rendall'. In particular the most prostrate of the seedlings has a seemingly more definite 'J. W. Porter' colour than the others. However I am aware of the unreliability of colour descriptions and only time will show whether habit and colour are significant.

Now in November one of the 'Rackliff' offspring has flowering shoots. These are not short and condensed as in the female parent, but already elongated to 4 or 5 inches. Time will show whether these flowers will be sterile.

In this connection I am indebted to Mr. Brian Proudley for telling me he has never succeeded in obtaining seed from 'W. T. Rackliff'. That I had not done so either, I had assumed to be my own fault! It now occurs to me that 'W. T. Rackliff' may be female sterile.

In fact the whole experiment suggests a number of interesting possibilities; perhaps for a younger member!

(Mrs. Parris is to be commended on her enterprise and its success. It will be interesting to see how the plants develop. Others should follow her example.

Bulb Associations

B. R. Malin, Worthing, Sussex

Growing bulbs as a complement to heathers is a subject which often arises and by no means everyone thinks they should be associated. Most difficulties seem to occur when insufficient space has been allowed for the growth of the heathers with the result that the bulbs have to grow through the plants; and whilst this may be effective for a short span when the bulbs are in full bloom, the untidy effect of sprawling leaf for some months afterwards upsets the whole appearance of the heathers.

The answer is in careful planning, and when planting the majority of heathers at the "statutory" 1 ft. 6 in. apart it is easy to miss out a few and plant bulbs instead. The space taken by three heathers can accommodate eighteen smallish bulbs easily and this way a blending of the best of both worlds can be attained whilst still leaving ample room for the surrounding heathers to expand.

Of course it is no use planting tall growing daffodils or long stemmed tulips as they will be out of balance with all but the tree heaths. Of the daffodils I suggest N. minor (nanus) or N. asturiensis (minimus), but many will prefer the more fragile-looking Hoop Petticoat N. bulbocodium, Angels' Tears N. triandrus or N. cyclamineus.

The leaves of tulips are rather unsightly at times, but if planted with the intermediate height heathers (say 1 ft. 6 in. in height) they do not draw attention to themselves and the splash of colour provided when they are in bloom is eye catching. T. Kaufmanniana 'césar Franck' and 'Stresa' (both yellow and red) 'Shakespeare' (salmon) and T. praestans 'Fusilier' (scarlet) are very suitable. All grow about 9 in. tall. Some will feel these are better planted to liven up the foliage of out of flower heathers rather than amongst those in flower, but to my mind few, if any of nature's colours clash in a natural association with each other. As in many things it is purely a matter of personal preference.

Don't despise the cheap to purchase Scilla sibirica, 3 in. – 4 in. high and ideal for the front of the border, it seeds freely and the blue flowers are rich and bright. Very charming too are the dwarf Cyclamen, lederifolium neapolitanum) for autumn and C. coum and C. repandum for spring. They colonise rapidly and again are better planted in the foreground so their delicate beauty can be seen at close quarters. Their leaves are also interesting and often marbled with silver or splashed with cream.

You can't go far wrong with the above, planted in bold groups and particularly where the object is to brighten beds of summer flowering heathers in spring. When planting, bear in mind that if your soil is not over well-drained it will help to sandwich all bulbs in a 1-in. top and bottom layer of 3/16ths grit to help prevent rotting and thus increase the life span of the bulbs.

(c.4.2)

To Hoe or not to Hoe

B. G. London, Taverham, Norwich

I choose not to hoe amongst the heathers. First, because heathers spread their roots much wider than the foliage and therefore hoeing can cut or tear these roots. Secondly, disturbing the soil encourages dormant weeds to grow and also disturbs the peat mulch which does tend to smother the common weeds, though on my sandy soil it encourages numerous heather seedlings to flourish.

These by some might also be classed as weeds, but I like to let them grow and then transplant those which look interesting to a separate plot in the hope of naming something special. Before writing this I did visit a nearby heather garden which is hoed and I noticed that the plants have not spread so quickly as mine, and more common weeds are appearing.

Heather Garden Tools

A. J. Stow, Flackwell Heath, Bucks.

Jack London writing from Norfolk says that, to trim the lawn edges, he uses an old hand scythe by pushing the point well into the soil close to the lawn edge and then pulling it along to cut the grass runners which tend to creep into the beds. He also mentioned that he should not have sown a grass seed which included creeping fescue.

I dare to suggest that whatever seed he used originally he would still have had to contend with this problem. Grass always seems to grow better in my heather beds than in the lawn, maybe it's because, unlike him, I always hoe between my plants. The tool I use is a 'swoe', not cheap, about £5.00, but extremely light and easy to use and well worth the initial expense if you believe in the use of the hoe or its equivalent.

The Chairman's wife, Mrs. Bowerman, uses electric cordless hand shears (re-chargeable after use) to prune the vast numbers of cultivated heathers at Champs Hill. I find that pruning is one of the few tasks in the heather garden that I do not like, to me it is tedious and does not do my vertebrae much good. One member does not agree that heathers should be pruned at all, but as deer, grouse and rabbits do not inhabit my garden to do the job the natural way, I see no alternative to keeping the plants from growing lank and straggly.

Top of the Pops

I wonder if Mr. Alan Umpelby of Newton Abbot, when writing to Mrs. MacLeod suggesting a popularity poll of heathers, realised the amount of interest that would be generated following my note in the Autumn Bulletin.

Most of you thought, probably quite rightly, that to name three only was extremely difficult and I received a lot of cards saying if I could name a couple more they would be etc. etc. One member was more to the point and wrote "three is miserably few: six at the least" and went on to name five, none of which gained enough votes to obtain a mention in this poll!

Another member stated that he would not be without any of his plants and thought it almost cruel to name only three and listed fifteen. A further letter listed three, was signed and then a P.S. was added "Here is my second list of three".

To all of the critics of this poll may I say I welcomed all of your letters, but point out that it was a popularity poll of your favourite heath and heather plants that you liked in your part of the country and this the majority have done. As your letters have arrived from Scotland, Ireland, Wales and all regions of England, I feel that a reasonable representative result has emerged.

Each plant was given three points for first choice, two for second and one for third choice and the result is as follows calculated on a percentage basis. At the request of several members I have listed the top ten.

		*	
1.	Calluna	'H. E. Beale'	18%
2.	Erica vagans	'Mrs. D. F. Maxwell'	10%
3.	E. carnea	'Pink Spangles'	5%
4.	E. carnea	'Springwood White'	4%
	Calluna	'Beoley Gold'	4%
6.	Daboecia cantabrica	f. alba	3%
	E. carnea	'Ann Sparkes'	3%
	E. carnea	'Vivellii'	3%
	Calluna	'Spring Cream'	3%
	Daboecia	'Jack Drake'	3%

Miss K. M. Fell of Wimborne, Dorset, deserves a special mention as her first and second selections were 'H. E. Beale' and 'Mrs. D. F. Maxwell' with third choice *Daboecia f. alba* and Jean Wilson from Clydebank, Scotland also agreed with the first two.

I was surprised by the absence of *E. cinerea*, the species in total only amounting to less than four per cent. I wonder why?

Additional Personal and Geographical Names for Hardy Heathers D. McClintock, Platt, Kent

In the past five Year-books there have been set out, with comments, personal names used for our heathers and a gazetteer of place names so used. Already there are enough more, some older, most new, to fill another contribution. And even then I exclude any of the names appearing in that strange production, Gandoger's Flora Europaea of 1888, since happily none of the names for the super-splats he created were effectively published. In the next Year-book, it is planned to try to make a start on similar details for the Cape Heaths, species and hybrids. Meanwhile who can help fill the gaps in these lists?

PERSONAL NAMES

Adrie (Calluna) Daughter of W. Haalboom Sr. Introduced 1972.

Ardy Tetralix) Daughter of H. van de Laar. Seedling 1968. Arina (Calluna) Wife of R. Geitenbeck of Darthuizer Nurseries, Leersum, 1972.

Barbara Fleur (Calluna) Daughter of finder of seedling, Mevr. G Michielsen-van Pelt in 1969.

Bianonis (multiflora) var of Sennen.

Ida M. Britten (vagans) Seedling found by Mrs. Britten 1971.

Bruckenthalia (the species); Bruckenthalii (Erica). Samuel von Bruckenthal (1721-1803), Transsylvanian nobleman, and some say also of his brother, Michael, also a Baron v Bruckenthal. Burfitt's Dwarf (ciliaris) Miss Joyce Burfitt, 1964.

caffra (Erica) of the Kaffirs.

Carolyn (Calluna) Daughter of Dr. Ir. T. Visser of Wageningen, finder pre-1972.

Cora (Daboecia x) Cora Jongeneal, daughter of P. G. Zwijnenburg

Corrie's White (Calluna) Shopkeeper at Moniaive, who found it locally in the 1930's.

Anthony Davis (Calluna) Second son of P. G. Davis of Haslemere, by 1971.

Jan Dekker (Calluna) Seedling in J. B. A. Dekker's garden at Mijdrecht by 1974.

Mrs. Dill (cinerea) Mrs. E. M. Dill of Hereford, finder in the Cuillins, pre-1925.

Isobel Dickson (Calluna) (Introduced by D. Hutton 1972).

Dirry (Calluna) Daughter of H. J. Weber, finder of sport, of Driebergen by 1972.

Jack Drake (Daboecia x) Raiser in 1950's, of Inshriach.

Adrienne Duncan (carnea) Lady Duncan of Jordanstone, neighbour of raiser, Lt.-Col. J. H. Stitt in 1950's.

Jimmy Dyce (*Calluna*) Secretary of British Pteridological Society. Finder in Norfolk in 1971.

Evelyn (Calluna) No special girl. Introduced 1972 by Dr. Visser.

Gatini (multiflora) var of Sennen.

Edith Godbolt (*Calluna*) Aunt of Alan Taylor, of Crowborough. Seedling c 1972.

Catherine Graham (vagans) Seedling at J. W. Porter's at Carryduff pre-1960.

Mrs. R. Graham (Calluna) Error for Mrs. R. Gray. Mrs. R. Green (Calluna) Error for Mrs. R. Gray.

Roland Haagen (Calluna) Friend of finder of sport in Ireland, P. G. Zwijnenburg, c 1970.

Harten's Findling (Calluna) W. Harten of Germany, by 1972. Hershey's Late (Calluna) Hershey's Nurseries, Pennsylvania, by

Hester (Calluna) Daughter of G. Seppen, finder, c 1971.

Holden Pink (vagans) ? H. S. Holden.

George Hunt (*lusitanica*) Of Lymington, finder of seedling in 1959. David Hutton (*Calluna*) Nurseryman of Aberfoyle, pre-1973.

Lorna-Anne Hutton (cinerea) Daughter of D. Hutton, by 1972. Ross Hutton (Calluna) Son of D. Hutton, by 1973.

Ineke (Calluna) I. Veldrink, sister of Warner Veldrink, finder, of Wageningen, by 1971.David Innes (Calluna) by 1952.

Jenny (Calluna) Name of a dog, 1971, ex-Letts.

John Kampa (carnea) Owner of nursery near Woking where seedling found pre-1974.

Kunzmann's Findling (Calluna) H. H. W. Kunzmann of Lübeck, finder in 1974 in Bavaria.

Lazaroana (arborea x umbellata) Professor at Madrid University, 1946.London's Pride (Calluna) Jack London, of Taverham, Norfolk, seedling 1971.

Lyall's Late White (Calluna) Introduced in Holland, spelt thus, from Lyle of Alloa, pre-1973.

(Bud) Lyle (Calluna) R. Lyle of Alloa, by 1975.

Wm. M'Alla (mackaiana) Finder in 1836 of this, the original, clone.
Maginess Pink (cinerea) Mrs. Maginess of Broadstone, finder
c. 1966.

Lady Maithe (Calluna) (Found in Dorset pre-1973).

Marilyn (Calluna) Daughter of Dr. Visser, finder, by 1972. Marleen (*Calluna*) Mevr. Visser, wife of finder, by 1972.

Minty (Calluna) Mrs. Araminta Dalyamer, secretary at the National Trust for Scotland. St. Kilda clone K12. 1966.

Mrs. Mitchell (cinerea) (Introduced by 1972).

Dr. Murle (Calluna) Shown 1972. Error for Dr. Murray?

Joseph Murphy (cinerea) Foreman at Yates' 1973, finder at Bray Head, Co. Wicklow.

Dr. Murray's White (Calluna) Dr. Murray of Edinburgh (a climber?).

Nicola (Calluna) N. Cefelo, Proudley neice, seedling by 1963.

Miss Paddy (Calluna) (Introduced by Hutton by 1972.)

Parsons' Spectrum (Calluna) W. R. A. Parsons of Woolhampton, seedling pre-1973.

Penny Bun (Calluna) Miss P. Ide, daughter of R. A. Ide, finder c. 1972.

Mr. Reeves (x darleyensis) C. W. Reeves, i/c Canadian cemetery at Holten, Overijssel pre-1973. Synonym of 'Darley Dale'.

Rock Ruth (cinerea) Mrs. R. A. Ide. Found at Mullion 1972. Doris Rushworth (Calluna) Mrs. Rushworth of Haworth, nr.

Keighley, finder, by 1973.

Silver Sandra (*Calluna*) Daughter of Dr. Visser, finder, by 1972. William Sloan (*tetralix*) (by 1970)? On staff of a Bagshot Nursery. Olive Turner (*Calluna*) (Waterer, by 1975).

Visser's Fancy (Calluna) Dr. Ir. T. Visser of Wageningen, finder pre-1972.

Janet Warrilow (cinerea) now Mrs. Cross, Secretary at Knap Hill. Found in Cornwall in 1950's.

Alex Warwick (Calluna) Founder of St. Kilda Club. St. Kilda clone K60, 1967.

Wijnie (Daboecia) Mrs. Gouda of Utrecht, finder, 1972.

Lionel Woolner (scoparia) Of Holdsworthy, Devon, finder in Tenerife c. 1970.

GEOGRAPHICAL NAMES

Aberdeen (Calluna) (Listed in U.S.A. 1972).

Applecross (Calluna) Village in W. Ross, near where found by J. Mair 1971.

Arne (ciliaris) Heath, E. of Wareham, Dorset, by 1969.

atlantica (Calluna) Atlantic Ocean.

australis (Erica) Southern, in this case, S. Europe.

Balbithian White (Calluna) Found by Mrs. McMurtrie of Balbithian House, Kintore in 1960's.

Boreray (Calluna) Island of St. Kilda group, W. of Outer Hebrides. Plant from St. Kilda, clone K70, 1967.

brabantica (Erica) Belgian province. Old name for "Low Dutch Heath".

Braemar (*Calluna*) Flowers at the time of the Braemar gathering, c. 1970.

Bray Head (Calluna) Headland in Co. Wicklow, 1969.

Bunsall (Calluna) G. Osmond's hamlet in Glos, c. 1970. cantabrica (Daboecia) Cantabrian Mtns in N. Spain. Name derives

from Tournefort's Erica cantabrica in 1700.

Castellar Blush (australis) Castellar de la Frontera, Andalusia, c. 1970.

Castellar Garnet (australis) Castellar de la Frontera, Andalusia. c. 1970. corsica (Erica) Corsica 1805.

Crowborough Beacon (Calluna) Seedling with Alan Taylor, c, 1971. Dart's Gold (Calluna) Sport at Darthuizer Nurseries by 1972.

Dart's Silver Rocket (Calluna) Seedling at Darthuizer Nurseries. by 1973.

Dunnydeer (Calluna) Cottage near Moniaive of finder of seedling. by 1972.

Eskdale Blea (Daboecia) Seedling at D. Richard's of Eskdale. Cumbria, c. 1970.

Eskdale Blonde (Daboecia). do.

Eskdale Maggie (Daboecia) Collected in France c. 1971, grown on at Eskdale.

Glenfiddich (Calluna) Distillery near Dufftown, Banff, near where found by 1973.

Glenlivet (Calluna) Distillery near Banff, near where found by 1973. Glenmorangle (Calluna) Distillery near Tain, Ross, near where found by 1973.

Harris Tweed (Calluna) A Scottish cloth. Harris, island in Outer Hebrides. Plant found on Dava Moor, near Grantown, pre-1972.

Hirta (Calluna) Main island of St. Kilda group, K 43, 1967.

Hollandia (Calluna) Sport found at Boskoop, Holland, 1968. Irish Dusk (erigena) From L. Carrowmore, Co. Mayo, Ireland. 1966.

Islay Mist (Calluna) A whisky. Islay, island of Inner Hebrides by

Keswick (Calluna) (Listed in British Columbia, 1970). Lewis Lilac (Calluna) Island of Outer Hebrides, c. 1970.

Linford (tetralix) Village N.E. of Ringwood, Hants., by 1970. Llanbedrog Pride (Calluna) Town of Lleyn promonotory, Caerns, N. Wales, where sport raised, introduced 1975.

Macalla (Calluna) Distillery on R Spey, Moray, near where found by 1973.

Mullach Mor (Calluna) Hill on St. Kilda. K 55. 1967. Mullardoch (Calluna) Hill in W. Ross, pre-1973.

Murcar (cinerea) Golf course near Aberdeen c. 1974. occidentalis (Erica) Western, in this case, W. Europe.

Oiseval (Calluna) Hill on St. Kilda. K 52. 1967.

olympica (Erica) Mt. Olympus.

Providence (cinerea) Monastery 'de Voorzienigheid' (= providence), at Steenwijkwerwold, Holland, 1972.

riojana (Erica) var of Sennen & Elias, Viloria de Rioja, N. Spain. 1929.

Sark Snowfall (cinerea) Island of Guernsey bailiwick. Sport 1972. septentrionalis (tetralix) Northern.

Silverwells (Daboecia x) Miss Logan Home's house in Berwicks. pre-1975.

Soay (Calluna) Island of St. Kilda group. Plant from St. Kilda. K 42, 1967.

Talisker (Calluna) Distillery in Skye, near where found by 1973. transsilvanica (Erica) Transsylvania, Roumanian province.

Recent writings on Heathers 1975

ANON. (J. STREET.) Heath of many colours. Garden News No. 897. 12 Sept. p. 3. Calluna 'Joseph's Coat'.

BAKER H. A. Notes on Erica in South Africa. Jnl. S. African Bot. 41(2), pp. 125-30.

Five new species and one new variety.

BALLESTER A., VIETTEZ E. and MANTILLA J. L. G. Sustancias quimicas inhibidores del crecimento y la germinacion presentas en Ericaceas. Anal. Inst. Bot. Cavanilles 31(1). pp. 235-43.

Seed germination and seedling growth of pasture grasses inhibited by extract from the species studied, Calluna, E. cinerea, E umbellata and E. vagans.

BARCLAY-ESTRUP P. The distribution of Calluna vulgaris (L.) Hull in western

Canada. Syesis 7. pp. 129-38.

Three localities in British Columbia, only one extensive and likely to survive, where it has been for perhaps 50 years. One branch of one plant

measured at 2.6 m. long.

BARTELS A. Erica carnea L. Die Schneeheide. Schweizerische Gärtnerzeitung 78(3) pp. 21-2. A short account.

BEKENDAM J. Het kiemdrag van heidezaad (Calluna). Tijdskrift der koninlijke Nederlandsche Heidemaatschappij 85(7-8). pp. 268-71. Seed is best collected in November and sown shallow early in the year.

Seeds need light to germinate best.

CHAPMAN S. B., Hibble, J. and RAFAREL C. R. Net aerial production by Calluna vulgaris on lowland heath in Britain. J. Ecol. 63(1), pp. 233-58.
CHAPMAN S. B. Hibble J. and RAFAREL C. R. Litter accumulation by Calluna vulgaris on lowland heath in Britain. J. Ecol. 63(1), pp.259-72.

CLAYTON J. The Heather Garden, Jnl. RHS. Sept. 100(9), pp. 394-5. The garden at Wisley.

Cox D. Dwarf heaths on the rocks. Garden News 899. 26 Sept. p. 9.

Rockery heathers in dry weather.

FLIEGE H. F. (Investigations . . . of ricketts-like organisms in root tumours of Erica gracilis). Mededelingen van de Faculteit Landbouwwetenschappen Rijksuniversiteit Gent. 39(2). pp. 1179-45.

GARRATT B. E. M. The rediscovery of Erica x Williamsii Druce. Watsonia 10(4). p. 466. Brief note on an exhibit of this.

GIBBS R. D. Chemistry of Ericaceae, in "Chemistry of Flowering Plants", McGill University 1974 Vol. III. pp. 1289-92.

"Information on this large family is more extensive than that of the other families, but it is still very patchy". Data are given for Andromeda, Calluna, Daboecia and several species of Erica.

GLÄSER K. Russisches Roulette mit Eriken. Gartenwelt 75(4) p. 82.

Growing E gracilis out of doors. Hoeg O. A. "Planter og Tradisjon". Universiteitsforlaget Oslo. Gives details of plant lore, names and uses for Andromeda, Calluna, Erica

cinerea and E. teiralix.

HOOGEKAMP M. Versuche zur Begrünung an Strassen . . . Rasen, Turf, Gazon

4(3). pp. 56-9 Calluna and E. tetralix recommended for motor-way verges.

JONES H. E. An experimental study of the relationship between transpiration and

the uptake of iron. J. Ecol. 59(1). pp. 167-78.

Waterlogged plants take up significantly more iron from the soil, with higher levels in E. cinerea, Transpiration rates are higher in E. cinerea than in E. tetralix.

LUCAS-PHILLIPS C. E. A choice of new heathers. Jnl. RHS. Sept. 100(9). pp. 406-9. Includes a fine colour picture of Ex praegeri 'Irish Lemon'.

LÜPNITZ D. Subalpine und alpine Pflanzengesellschaften auf der Insel Pico. Bot. Jb. 952 pp. 149-73.

Includes good photos of Daboecia azorica and Erica azorica.

McCLINTOCK D. The Cornish Hybrid Heath Erica x Williamsii Druce. The Lizard 5(2). pp. 3-5.

A full account of the then known occurrences of this plant.

MALCOLM D. C. The influence of heather in silvicultural practice - an appraisal. Scottish Forestry 29(1). pp. 14-24. Trees planted into Calluna make slow progress.

NORGAARD O. Lyng: haven Bruckenthalia spiculifolia. Haven 75(2). p. 56.

OLIVER E. G. H. Notes on African plants. Ericaceae. Bothalia 11(1 & 2). pp. 115-6 Erica krugeri a new species "remarkable in being almost invisible to passers by'

OLIVER E. G. H. Erica vallis-aranearum. Flowering Plants of S. Africa 42. Plate 1680. A new species from near Cape Town: about 620 now known in all. PARKINSON J. D. and WHITTAKER J. B. A study of two physiological races of the heather psyllid Strophingia ericae. Biol. Jul. Linn. Soc. 7(1) pp. 73-87. A leaf-sucker abundant on Calluna has one race up to 200 m. and another above this height.

PEARSON V. and READ D. J. The physiology of the mycorrhizal endophyte of Calluna vulgaris. Trans. Br. Mycol. Soc. 64(1). pp. 1-7.
The optimal temperature for growth of this heather root-fungus is 20°C,

and $p\hat{H}$ 6.6.

PENNINGSFELD F. Erfahrungen und Versuche mit selten kultivierten Moorbeetpflanzen. Gartenwelt 75(8). 175-9. Chiefly on Erica ventricosa, with colour photos of E. 'Helene', 'Osterglocke'

and 'Vilmorin'

and Vilmorin.

REED D. J. Pezizella ericae sp nov the perfect state of a typical mycorrhizal endophyte of Ericaceae found chiefly on the roots of Calluna. Trans. Br. Mycol. Soc. 63(2). pp. 381-2.

SALAS C, BALLESTER A and VIEITEZ E. Estudio biological y quimico de Erica umbellata L. Annales de Edefologia y Agrofologia 32 (9-1): p. 807.

SCANNELL M. J. P. William Bowles and the introduction of Daboecia cantabrica

to cultivation in Britain. Jnl. RHS. 100(7). pp. 318-9. SCANNELL M. J. P. Craiggamore and Craiggabeg in West Galway. Irish Nat. Jul. 18(7). pp. 224. Precision on the locus classicus for E. mackatana.

STACE C. A. x Ericalluna, in "Hybridisation and the British Flora", Academic Press 1975. p. 339.

STEEKELENBURG N. A. M. VAN. Influence of low temperatures on the survival of

Phytophora cinnamomi Rands. in soil. Medelingen der Faculteit Landbouwwetenschappen . . . Gent 38(3). pp. 1399-1405. Phytophora does not survive in the soil during winter in Germany. At Boskoop

it survived below 10 cm.

TOAL W. J. Winter-flowering heaths. Irish Times c. 15 June 1975.
WEBB D. A. Erica, in "Hybridisation and the British Flora", Academic Press. 1975. pp. 339-41. Data on all the claimed hybrids.

WHITSEY F. September plant. Popular Gardening 31 August. No. 3968.

Heather, the plant of the month.

WOOLEY, B. Have a heather mixture. Amateur Gardening. 15 March. p. 41.

WOOLEY B. Take to the heather. Amateur Gardening. 22 March. p. 47.

Visset L Scanning electron microscopy of pollen grains of the European species of the genus *Erica*, *Bull*. Soc. Bot. de France. 122. pp. 203-16.

Copious photos and a key. All except E. terminalis have their pollen in tetrads.

In addition there have been many fine articles in our Dutch contemporary "Ericultura".

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Zone 5: Midlands:

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National Press, March 5th, 1975

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